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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,303

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EXAMINER

DANEGA, RENEE A

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3736

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/564,303	Applicant(s) UCHIYAMA ET AL.	
	Examiner RENEE DANEGA	Art Unit 3736	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-4,6-17,42 and 44 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-4,6-17,42 and 44 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities: Claim 4 doesn't specifically state which signal from claim 1 controls the power supply control section. Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 4, 10-17, 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over D'Andrea et al. (US 5395366) in view of Marshall (US 6632175) and Meron (US 20020042562).

Regarding claims 1, 10-17 and 44, D'Andrea teaches an in-vivo information acquisition system comprising an in-vivo information acquisition apparatus (1) to be inserted into a body to examine a specimen and acquire in-vivo information, the apparatus comprising: a specimen collection section (5) for collecting a specimen at an examination site in a body cavity; a labeling section having identification information unique to the in-vivo information acquisition apparatus a communication section capable of receiving a transmitted signal from outside and transmitting signals out (3); a power supply (27') (Figure 7) section for supplying electrical power; an external apparatus outside the body

Art Unit: 3736

cavity that's capable of acquiring an evaluation result from the in-vivo apparatus via the communication section (8); wherein a plurality of the in-vivo information acquisition apparatuses are provided inside the body cavity in which collecting the specimen by the specimen collecting section is simultaneously or sequentially started in response to a first command signal sent and signals can be communicated externally identifying locations in response to a third signal from the external apparatus to the plurality of in-vivo information acquisition apparatuses (column 3, lines 40-45) (column 6, lines 50-65) (column 10, lines 40-45). D'Andrea doesn't expressly teach reaction and evaluation of the specimen. However, Marshall teaches an in-vivo specimen evaluating system in which chemical reagent sensors such as pH sensors, LED tunable sensors, cell constituent, imaging, or any other desirable sensors are activated by a signal from a controller (54) that may be internal or external of the body and provides a memory and data processor (16) for processing, or evaluating, and storing data prior to being signaled by the controller to transmit the sensed results to an external apparatus (column 4, line 61-column 5 line 20) (column 10, lines 5-34). It would have been obvious in view of Marshall to provide evaluation and transmission of data about the sample collected by adding sensors in the fluid collecting area in D'Andrea to provide real-time evaluation and diagnostics. D'Andrea further doesn't expressly teach an indwelling. However, Meron teaches an in vivo sensing device with indwellings (23) (Figure 2) (333) (3B) for immobilizing or controlling rate of movement through a body. It would have been obvious in view of Meron to provide indwellings on D'Andrea in order to provide some control of the capsule mobility.

Art Unit: 3736

Regarding claim 4, D'Andrea teaches the in-vivo apparatus includes a power supply control section that controls the supply of the power supply section based on the signal when the communication section receives the signal transmitted from the outside (column 6, lines 52-58).

3. Claims 2-3 and 6-8 rejected under 35 U.S.C. 103(a) as being unpatentable over D'Andrea modified by Marshall and Meron as applied to claim 1 above, and further in view of Gadzinski (US 20010051766).

Regarding claims 2-3, D'Andrea modified by Marshall and Meron doesn't expressly teach a RFID labeling section. However, Gazdzinski teaches an endoscopic probe with an RFID tag which allows for the writing or reading of multiple probes simultaneously [0223]. It would have been obvious in view of Gazdzinski to provide a RFID label on the apparatus of D'Andrea modified by Marshall and Meron in order to distinguish amongst information being collected from multiple apparatuses.

Regarding claim 6, D'Andrea modified by Marshall and Meron doesn't expressly teach an adhesive container for storing a biocompatible adhesive and release section. However, Gazdzinski teaches a container and release [0270] that would be capable of releasing a biocompatible adhesive. It would have been obvious in view of Gazdzinski to provide a control release container in D'Andrea modified by Marshall and Meron in order to get a material to a desired area of the body.

Regarding claims 7, 8, D'Andrea modified by Marshall and Meron teaches a battery but doesn't teach it in wireless communication with an external supply. However,

Art Unit: 3736

Gazdzinski teaches a power supply control (702) that controls power supply based on when the communication sections receives a signal from the outside, wherein the power supply is an externally chargeable power storage capacitor section that is power wirelessly (Figure 7) [0348] eliminating the need for in vivo energy storage. It would have been obvious in view of Gazdzinski to provide external power control in D'Andrea modified by Marshall and Meron in order to eliminate the need for in-vivo storage and to conserve energy.

Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Andrea modified by Marshall and Meron as applied to claim 1 above, and further in view of Couvillon, Jr. (7063671).

Regarding claim 9, D'Andrea modified by Marshall and Meron teaches a shutter for closing the cell enclosure after the specimen is introduced into the interior of the cell enclosure but doesn't teach it to be controlled by an ion-conducting actuator doesn't expressly teach the specimen evaluation section having an ion-conducting actuator shutter for introducing the specimen [0092]. However, Couvillon, Jr. teaches using a cutting shuttered ion control aperture to capture a specimen in vivo callable of exerting a strong actuation force (abstract) (Figure 1) (column 2, lines 12-30). It would have been obvious in view of Couvillon, Jr. to use an ion-conducting actuator shutter in D'Andrea modified by Marshall and Meron order to exert a strong actuation force to collect a specimen sample to be tested in vivo.

Art Unit: 3736

4. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over D'Andrea modified by Marshall and Meron as applied to claim 1 above, and further in view of Wang (US 20050148842).

Regarding claim 42, D'Andrea modified by Marshall and Meron teach the system as claimed in claim 1 for sensing a plurality of things including cancer but doesn't expressly teach how the signals are evaluated. However, Wang teaches the specimen-evaluating section includes an arithmetic section for operating an arithmetic operation and wherein the measurement data and reference data are subjected to the arithmetic operation in the section so as to calculate examination data in determining if cancer is present [0074] [0075]. It would have been obvious in view of Wang to provide a cancer evaluation arithmetic section in D'Andrea modified by Marshall and Meron in order to determine if cancerous cells are present.

Response to Arguments

5. Applicant's arguments, with regards to the amended claims filed 7/18/11, with have been fully considered and are unpersuasive. Applicant argues that the combination of Marshall does not teach a reactor section for reacting the specimen with a reagent. However, Marshall teaches that sensing module can include "cavities filled with a desired type of sensing substance" and further that the sensing substance can be a reagent such as a "chemically sensitized film" (column 10, lines 5-20). A reagent doesn't therefore have to have the undesirable effect of being spread throughout the subject's system as applicant suggests but rather reacts with fluids while staying a part of the film. Additionally, the original reference of D'Andrea is relied upon for a

Art Unit: 3736

specimen-collecting section and adding a reactor and evaluator from Marshall would have been obvious as stated in the above rejection to provide real-time diagnostics.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RENEE DANEGA whose telephone number is (571)270-3639. The examiner can normally be reached on Monday through Thursday 8:30-5:00 eastern time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Max Hindenburg can be reached on (571) 272-4726. The fax phone

Art Unit: 3736

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RAD

/Max Hindenburg/
Supervisory Patent Examiner, Art Unit 3736